RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/398,365

Input Set : N:\Crf3\RULE60\09398365.RAW.txt
Output Set: N:\CRF4\06022003\I398365.raw

SEQUENCE LISTING

ENTERED

```
  3 (1) GENERAL INFORMATION:
  4       (i) APPLICANT: Havelund, Svend
  5                      Ribel, Lise
  6                      Jonassen, H
  7                      Andersen, Anne Flint
  8                      Markussen, Jan
 10      (ii) TITLE OF INVENTION: ACYLATED INSULIN
 12     (iii) NUMBER OF SEQUENCES: 40
 13      (iv) CORRESPONDENCE ADDRESS:
 14             (A) ADDRESSEE: Novo Nordisk of North America, Inc.
 15             (B) STREET: 405 Lexington Avenue, 64th Floor
 16             (C) CITY: New York
 17             (D) STATE: New York
 18             (E) COUNTRY: United States of America
 19             (F) ZIP: 10174-6401
 21       (v) COMPUTER READABLE FORM:
 22             (A) MEDIUM TYPE: Floppy disk
 23             (B) COMPUTER: IBM PC compatible
 24             (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 25             (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
 27      (vi) CURRENT APPLICATION DATA:
C--> 28             (A) APPLICATION NUMBER: US/09/398,365
C--> 29             (B) FILING DATE: 17-Sep-1999
 30             (C) CLASSIFICATION:
 31     (vii) PRIOR APPLICATION DATA:
 32             (A) APPLICATION NUMBER: US/08/400,156
 33             (B) FILING DATE: 08-MAR-1995
 34    (viii) ATTORNEY/AGENT INFORMATION:
 35             (A) NAME: Lambiris, Elias J.
 36             (B) REGISTRATION NUMBER: 33,728
 37             (C) REFERENCE/DOCKET NUMBER: 7039.204-WO
 38          (2) INFORMATION FOR SEQ ID NO: 1:
 39            (i) SEQUENCE CHARACTERISTICS:
 40                  (A) LENGTH: 21 amino acids
 41                  (B) TYPE: amino acid
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/398,365

Input Set : N:\Crf3\RULE60\09398365.RAW.txt
Output Set: N:\CRF4\06022003\I398365.raw

W--> 64 Glu Asn Tyr Cys Xaa

W--> 79 Xaa Val Xaa Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr

W--> 94 (ii) MOLECULE TYPE: DNA

W--> 111 (ii) MOLECULE TYPE: DNA

W--> 128 (ii) MOLECULE TYPE: DNA

RAW SEQUENCE LISTING

PATENT APPLICATION NO: US/09/398,365

Input Set : N:\Crf3\RULE60\09398365.RAW.txt
Output Set: N:\CRF4\06022003\I398365.raw

W--> 143 (ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:

(2) INFORMATION FOR SEQ ID NO: 7:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

W--> 158 (ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:

(2) INFORMATION FOR SEQ ID NO: 8:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 25 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

W--> 175 (ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:

(2) INFORMATION FOR SEQ ID NO: 9:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 100 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

W--> 190 (ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:

(2) INFORMATION FOR SEQ ID NO: 10:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

W--> 207 (ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:

(2) INFORMATION FOR SEQ ID NO: 11:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/398,365

Input File : N:\Crf3\RULE60\09398365.RAW.txt
Output File: N:\CRF4\06022003\I398365.raw

(ii) MOLECULE TYPE: DNA

(ii) MOLECULE TYPE: DNA

(ii) MOLECULE TYPE: cDNA

RAW SEQUENCE LISTING DATE: [illegible]
PATENT APPLICATION: US/09/398,365 TIME: [illegible]

Input Set : N:\Crf3\RULE60\09398365.RAW.txt
Output Set: N:\CRF4\06022003\I398365.raw

```
    ACT CCA AAG TCT GAC GAC GCT AAG GGT ATC GTT GAA CAA TGT TGT ACT      [illegible]
    Thr Pro Lys Ser Asp Asp Ala Lys Gly Ile Val Glu Gln Cys Cys Thr
405                 80                  85                  90
    TCT ATC TGT TCT TTG TAC CAA TTG GAA AAC TAC TGT AAC TAGACGCAGC       [illegible]
    Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
            95                  100
    [illegible]AGGCTC TAGA                                                [illegible]
    (2) INFORMATION FOR SEQ ID NO: 15:
515     (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: 104 amino acids
            (B) TYPE: amino acid
            (D) TOPOLOGY: linear
        (ii) MOLECULE TYPE: protein
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
324 Met Lys Ala Val Phe Leu Val Leu Ser Leu Ile Gly Phe Cys Trp Ala
     1               5                  10                  15
327 Gln Pro Val Thr Gly Asp Glu Ser Ser Val Glu Ile Pro Glu Glu Ser
328             20                  25                  30
330 Leu Ile Ile Ala Glu Asn Thr Thr Leu Ala Asn Val Ala Met Ala Lys
331         35                  40                  45
333 Arg Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu
334     50                  55                  60
336 Tyr Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Ser Asp
337 65                  70                  75                  80
339 Asp Ala Lys Gly Ile Val Glu Gln Cys Cys Thr Ser Ile Cys Ser Leu
340                 85                  90                  95
342 Tyr Gln Leu Glu Asn Tyr Cys Asn
                [illegible]
346 (2) INFORMATION FOR SEQ ID NO: 16:
348     (i) SEQUENCE CHARACTERISTICS:
            (A) LENGTH: [illegible] base pairs
            (B) TYPE: nucleic acid
351         (C) STRANDEDNESS: single
352         (D) TOPOLOGY: linear
W--> 354    (ii) MOLECULE TYPE: DNA
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:
    [illegible]
    [illegible]
    [illegible]
    [illegible]
    [illegible] AAGTGAAACC AACTTCGAAA CATGAA[illegible]AA A[illegible]ATTT [illegible]CAAAGAA
    [illegible]
    [illegible]
    (2) INFORMATION FOR SEQ ID NO: 17:
            (i) SEQUENCE CHARACTERISTICS:
                (A) LENGTH: [illegible]
```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/398,365

Input Set : N:\Crf3\RULE60\09398365.RAW.txt
Output Set: N:\CRF4\06022003\I398365.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos.22
Seq#:2; Xaa Pos.1,3,30

VERIFICATION SUMMARY DATE: [illegible]
PATENT APPLICATION: US/09/398,365 TIME: [illegible]

Input Set : N:\Crf3\RULE60\09398365.RAW.txt
Output Set: N:\CRF4\06022003\I398365.raw

L:[illegible] M:[illegible] C: Keyword misspelled or invalid format, [PA] APPLICATION NUMBER:
L:[illegible] M:[illegible] C: Keyword misspelled or invalid format, [PF] FILING DATE:
L:64 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:16
L:[illegible] M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
M:341 Repeated in SeqNo.2
L:[illegible] M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=[illegible]
L:111 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=4
L:126 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=5
L:141 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=6
L:156 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=7
L:175 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=8
L:190 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=9
L:207 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=10
L:222 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=11
L:239 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=12
L:256 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=13
L:354 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=16
L:479 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=19
L:592 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=22
L:701 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=25
L:810 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=28
L:819 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=31
L:1043 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=34
L:1156 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=37
L:1268 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=40
L:1409 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=43
L:[illegible] M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=46
L:[illegible] M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=47